

**WE CLAIM AS OUR INVENTION:**

1. A method for generating the three-dimensional ultrasound image of a body region of a patient, said body region exhibiting spatial variation due to breathing motion, comprising the steps of:

applying an ultrasound transducer arrangement to a body region of a patient exhibiting spatial variations due to breathing motion, and conducting an ultrasound scan of said region to obtain electrical signals;

from said electrical signals, generating temporally successive B-images of said body region in a stationary image plane, said successive B-images, due to said breathing motion, pertaining to respective slice planes of the body region; and

registrating the successive B-images and combining the registrated successive B-images in an image processor to form a three-dimensional image of said body region.

2. A method as claimed in claim 1 comprising employing an ultrasound transducer array as said ultrasound transducer arrangement.

3. A method as claimed in claim 1 comprising the additional step of converting said three-dimensional image of said body region into at least one C-image of said body region.